

ATTACHMENT 7

SPECIAL CONDITIONS RATIONALE

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

B. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1.a. Nutrient Enriched Waters Reopener

Rationale: Significant portions of the Chesapeake Bay and its tributaries are listed as impaired on Virginia's 303(d) list of impaired waters for not meeting the aquatic life use support goal, and the draft 2004 Virginia Water Quality Assessment 305(b)/303(d) Integrated Report indicates that 83% of the mainstem Bay does not fully support this use support goal under Virginia's water quality assessment guidelines. Nutrient enrichment is cited as one of the primary causes for impairment.

Guidance Memorandum 04-2017 implements DEQ's best professional judgment decision to limit increases in nutrient loading from facilities listed on the Chesapeake Bay Program Significant Discharger List. Guidance Memorandum 04-2017 provides the basis for this decision and specifies the procedure for determining annual effluent limitations for these parameters for each affected facility, as well as monitoring requirements and a special condition to be included in each affected permit. Additionally, Guidance Memorandum 04-2017 includes a special condition for submittal of a Basis of Design Report to construct and operate a range of nutrient removal technologies, including but not limited to the limit of technology, as well as a special condition requiring consideration of alternatives and submittal of a plan to optimize nutrient removal with the existing facility. In accordance with the guidance memorandum, this permit contains a special condition requiring submittal of these reports.

1.b. Total Maximum Daily Load (TMDL) Reopener

Rationale: For specified waters, Section 303(d) of the Clean Water Act requires the development of total maximum daily loads necessary to achieve the applicable water quality standards. The TMDL must take into account seasonal variations and a margin of safety. In addition, Section 62.1-44.19:7 of the State Water Control Law requires the development and implementation of plans to address impaired waters, including TMDLs. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to incorporate the requirements of a TMDL once it is developed. In addition, the reopener recognizes that, in according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other wasteload allocation prepared under Section 303 of the Act.

2. Licensed Operator Requirement

Rationale: The Permit Regulation, 9 VAC 25-31-200 D and Code of Virginia 54.1-2300 et. seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators.

3. Operations & Maintenance (O & M) Manual

Rationale: The State Water Control Law, Section 62.1-44.21 allows requests for any information necessary to determine the effect of the discharge on State waters. Section 401 of the Clean Water Act requires the permittee to provide opportunity for the state to review the proposed operations of the facility. In addition, 40 CFR 122.41 (e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) in order to achieve compliance with the permit (includes laboratory controls and QA/QC).

4. Notification Levels

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-200 and 40 CFR 122.42 (a) require notification of the discharge of certain parameters at or above specific concentrations for existing manufacturing, commercial mining and silvicultural discharges.

5. Quantification Levels Under Part I.A.

Rationale: States are authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR part 130, Water Quality Planning and Management, subpart 130.4. Section b. of the special condition defines QL and is included per BPJ to clarify the difference between QL and MDL.

6. Compliance Reporting Under Part I.A.

Rationale: Defines reporting requirements for toxic parameters and some conventional parameters with quantification levels to ensure consistent, accurate reporting on submitted reports.

7. Materials Handling and Storage

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-50 A., prohibits the discharge of any wastes into State waters unless authorized by permit. The State Water Control Law, Sec. 62.1-44.18:2, authorizes the Board to prohibit any waste discharge which would threaten public health or safety, interfere with or be incompatible with treatment works or water use. Section 301 of the Clean Water Act prohibits the discharge of any pollutant unless it complies with specific sections of the Act.

8. Hydrostatic Testing

Rationale: Hydrostatic test water discharges are potentially contaminated with facility products and, therefore, qualify for permit coverage under the State Water Control Law and the Clean Water Act.

9. Cooling Water and Boiler Additives

Rationale: Chemical additives may be toxic or otherwise violate the receiving stream water quality standards. Upon notification, the regional office can determine if this new additive will warrant a modification to the permit.

10. Sludge Management Plan

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-420, and 40 CFR 503.1 specify the purpose and applicability for sludge management plans. The VPDES Permit Regulation, 9 VAC 25-31-100 J.4., also sets forth certain detailed information which must be included in a sludge management plan. The VPDES sewage sludge permit application form and its attachments constitute the sludge management plan and will be considered for approval with the VPDES permit. In addition, the Biosolids Use Regulation, 12 VAC 5-585-330 and 340, specifies the general purpose and control requirements for an O&M manual in order to facilitate proper O&M of the facilities to meet the requirements of the regulation.

11. Reuse Wastewater Effluent

Rationale: Section 62.1-44.16 of the State Water Control Law requires the submittal of plans and specifications for industrial facilities with a potential or actual discharge to State waters. Section 62.1-44.19 of the State Water control Law requires the submittal of plans and specifications

for sewerage systems with a potential or actual discharge to State waters. The Board shall consult with and give consideration to the written recommendations of the VDH pertaining to the protection of public health.

Additional Discussion: The permittee submitted a detailed Concept Engineering Report on June 12, 2002 to the DEQ and VDH. The Department approved the CER on October 6, 2003. To date, the CER and/or reclaimed water reuse plan has been amended, August 14, 2006. The proposed condition incorporates new terms and conditions developed since the last reissuance.

C. TOXICS MANAGENENT PROGRAM (TMP)

Rationale: To determine the need for pollutant specific and/or whole effluent toxicity limits as may be required by the VPDES Permit Regulation, 9 VAC 25-31-220 D. and 40 CFR 122.44 (d). See Attachment 9 of this fact sheet for additional justification.

D. STORM WATER MANAGEMENT CONDITIONS

1. Sampling Methodology for Specific Outfalls 002

Rationale: Defines methodology for collecting representative effluent samples in conformance with applicable regulations.

2. General Storm Water Conditions

a. Sample Type

Rationale: This stipulates the proper sampling methodology for qualifying rain events from regulated storm water outfalls. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

b. Recording of Results

Rationale: This sets forth the information which must be recorded and reported for each storm event sampling (ie. date and duration event, rainfall measurement, and duration between qualifying events). It also requires the maintenance of daily rainfall logs which are to be reported. This condition is carried over from the previous storm water pollution prevention plan requirements contained in the EPA storm water baseline industrial general permit.

c. Sampling Waiver

Rationale: This condition allows the permittee to collect substitute samples of qualifying storm events in the event of adverse climatic conditions. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

d. Representative Discharge

Rationale: This condition allows the permittee to submit the results of sampling from one outfall as representative of other similar outfalls, provided the permittee can demonstrate that the outfalls are substantially identical. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

e. Quarterly Visual Examination of Storm Water Quality

Rationale: This condition requires that visual examinations of storm water outfalls take place at a specified frequency and sets forth what information needs to be checked and documented. These examinations assist with the evaluation of the pollution prevention plan by providing a simple, low cost means of assessing the quality of storm water discharge with immediate feedback. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

f. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

Rationale: This condition requires that the discharge of hazardous substances or oil from a facility be eliminated or minimized in accordance with the facility's storm water pollution prevention plan. If there is a discharge of a material in excess of a reportable quantity, it establishes the reporting requirements in accordance with state laws and federal regulations. In addition, the pollution prevention plan for the facility must be reviewed and revised as necessary to prevent a reoccurrence of the spill. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

g. Allowable Non-Storm Water Discharges

Rationale: The listed allowable non-storm water discharges are the same as those allowed by the EPA in their multi-sector general permit, and are the same non-storm water discharges allowed under the Virginia General VPDES Permit for Discharges of Storm Water Associated with Industrial Activity, 9 VAC 25-151-10 et seq. Allowing the same non-storm water discharges in VPDES individual permits provides consistency with other storm water permits for industrial facilities. The non-storm water discharges must meet the conditions in the permit.

3. Storm Water Pollution Prevention Plan

Rationale: The Clean Water Act 402(p) (2) (B) requires permits for storm water discharges associated with industrial activity. VPDES permits for storm water discharges must establish BAT/BCT requirements in accordance with 402(p)(3) of the Act. The Storm Water Pollution Prevention Plan is the vehicle proposed by EPA in the final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity (Federal Register Sept 9, 1992) to meet the requirements of the Act. Additionally, the VPDES Permit Regulation, 9 VAC 25-31-220 K., and 40 CFR 122.44 (k) allow BMPs for the control of toxic pollutants listed in Section 307 (a)(1), and hazardous substances listed in Section 311 of the Clean Water Act where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law.

4. Facility-specific Storm Water Management Conditions

Rationale: These conditions set forth additional site-specific storm water pollution prevention plan requirements. Use of these conditions is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and DEQ's general permit for storm water associated with industrial activities and is consistent with those permits.

ATTACHMENT 8

TOXICS MONITORING/TOXICS REDUCTION/
WET LIMIT RATIONALE

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard

Virginia Beach, VA 23462

SUBJECT: Toxic Management Program (TMP) Monitoring for Western Refining Yorktown Inc.
(VA0003018)

TO: Melinda Woodruff

FROM: Deanna Austin *DBA*

DATE: March 10, 2010

COPIES: TRO File (PPP #033)

Western Refining Yorktown, Inc. is a refinery producing unleaded gasoline, diesel fuels, liquefied petroleum gas, butane, furnace oil, petroleum coke, and sulfur. The refinery capacity for production is 70,000 barrels of crude oil per day. There are 3 permitted outfalls and 3 permitted internal outfalls. Outfall 001 and 002 discharge to the York River. **Outfall 001** contains discharges from final treated process and sanitary wastewater from the internal outfalls 101 and 102. Outfall 102 is once-through cooling water. **Outfall 002** discharges stormwater associated with industrial activity, fire main wastewater, hydrostatic test discharge water, and can also discharge flows diverted from internal outfalls 101 and 102 when needed. **Outfall 201** is an internal outfall to 002 and discharges hydrostatic test waters. Toxicity monitoring will be added to outfall 201 on an annual basis. DEQ guidance document 00-2012 requires toxicity monitoring for all hydrostatic test waters and since outfall 201 is monitored separately from outfall 002, toxicity monitoring is warranted. Outfall 004 discharges fire main flushing and freeze protection water. Reclamation and reuse waters are used for the processes at outfall 004. Toxicity monitoring will not be placed on outfall 004 at this time. Monitoring of outfall 004 for pollutants is new to this permit term.

Toxicity monitoring has been performed on outfalls 001 and 002 during the previous permit terms. Monitoring for acute and chronic toxicity has been performed using *Mysidopsis bahia*, now known as *Americamysis bahia* (A.b.). During a previous permit reissuance, A.b. was shown to be the most sensitive species. Monitoring has been 1/year. The data collected during the current permit term (2005-2010) is shown below. Toxicity monitoring for outfalls 001 and 002 will continue in the reissued permit.

OUTFALL	DESCRIPT	SPECIES	SAMPLEDT	LC50	SURVIVAL	NOEC	TU	LAB
001	1st Annual Acute	M.b.	11/20/05	100	100		1	CBI
001	2nd Annual Acute	M.b.	11/16/06	100	100		1	CBI
001	3rd Annual Acute	M.b.	11/14/07	100	100		1	CBI
001	4th Annual Acute	M.b.	11/5/08	100	100		1	CBI
001	5th Annual Acute	M.b.	10/21/09	100	100		1	CBI

OUTFALL	DESCRIPT	SPECIES	SAMPLEDT	LC50	SURVIVAL	NOEC	TU	LAB
001	1st Annual Chronic	M.b.	11/15/05		100	100	1	CBI
001	2nd Annual Chronic	M.b.	11/14/06		100	100	1	CBI
001	3rd Annual Chronic	M.b.	11/12/07		100	100	1	CBI
001	4th Annual Chronic	M.b.	11/4/08		100	100	1	CBI
001	5th Annual Chronic	M.b.	10/21/09		85	100	1	CBI
002	1st Annual Acute	M.b.	11/20/05	100	100		1	CBI
002	2nd Annual Acute	M.b.	1/16/06	100	100		1	CBI
002	3rd Annual Acute	M.b.	11/13/07	100	100		1	CBI
002	4th Annual Acute	M.b.	11/5/08	100	100		1	CBI
002	5th Annual Acute	M.b.	10/20/09	100	100		1	CBI
002	1st Annual Chronic	M.b.	11/15/05		100	100	1	CBI
002	2nd Annual Chronic	M.b.	1/14/06		100	65	1	CBI
002	3rd Annual Chronic	M.b.	11/12/07		100	100	1	CBI
002	4th Annual Chronic	M.b.	11/4/08		100	100	1	CBI
002	5th Annual Chronic	M.b.	10/20/09		98	100	1	CBI

M.b. - *Mysidopsis bahia*, which is now known as *Americamysis bahia*

C. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring - Outfalls 001, 002 and 201

- a. In accordance with the schedule in 2. below, the permittee shall conduct **annual acute** and **annual chronic** toxicity tests. The permittee shall collect 24-hour, flow proportioned composite samples of final effluent from outfalls 001 and 002. The permittee shall collect a grab sample of final effluent from outfall 201. All toxicity samples shall be taken at the same time as the monitoring in Part I.A. of this permit.

Outfalls 001 and 002

The acute tests to use for outfalls 001 and 002 shall be:

48-Hour Static Acute test using Americamysis bahia (A.b.)

Outfall 201

The acute tests to use for outfall 201 shall be:

48 Hour Static Acute test using Americamysis bahia (A.b.)

and

48 Hour Static Acute test using Cyprinodon variegatus (C.v.)

The acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC_{50} . Express as the results as TU_a (Acute Toxic Units) by dividing $100/LC_{50}$ for DMR reporting.

Outfalls 001 and 002

The chronic test shall be:

7-Day Static Renewal Survival, Growth and Fecundity test using Americamysis bahia (A.b.)

The chronic test shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be

quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing $100/NOEC$ for DMR reporting. Report the LC_{50} at 48 hours and the IC_{25} with the NOEC's in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- b. The test dilutions should be able to determine compliance with the following endpoints:
 - (1) Acute LC_{50} of 100% equivalent to a TU_a of 1.0 for outfalls 001, 002, and 201.
 - (2) Chronic NOEC of 18% equivalent to a TU_c 5.55 for outfall 001
 - (2) Chronic NOEC 2% of equivalent to a TU_c of 50.0 for outfall 002
- c. The test data will be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of 1.a. may be discontinued.
- d. All applicable data will be reevaluated for reasonable potential at the end of the permit term.
- e. If, in the testing according to C.1., any toxicity tests are invalidated, the tests shall be repeated within the testing period that the original test was taken, or if already past that period, within thirty(30) days of notification. If there is no discharge during this period, a sample must be taken during the first discharge.

2. Reporting Schedule:

The permittee shall report the results and supply **one** complete copy of the toxicity test reports specified in this Toxics Management Program to the Tidewater Regional Office. A complete report must contain a

copy of all laboratory benchsheets, certificates of analysis, and all chains of custody. All data shall be submitted by the 10th of the month following sampling. Sampling and reporting shall be in accordance with the following schedule:

(a)	Conduct first annual acute biological test for outfalls 001, 002, and 201 and conduct first annual chronic biological test for outfalls 001 and 002	By December 31, 2011
(b)	Submit results of biological test	By the 10 th of the month following sampling but no later than January 10, 2012
(c)	Conduct subsequent annual biological tests for outfalls 001, 002, and 201	By December 31, 2012, 2013, and 2014
(d)	Submit results of all biological tests	By the 10 th of the month following sampling but no later than January 10, 2013, 2014, 2015

ATTACHMENT 9

MATERIAL STORED

Significant Materials

Significant materials are ubiquitous at the Yorktown Refinery. The refinery is designed and managed to prevent significant materials from being exposed to stormwater runoff. Stormwater collection systems in the refinery are engineered so that where such exposure cannot be controlled, stormwater receives appropriate treatment to remove pollutants associated with the significant materials prior to being discharged to surface waters or recycled for reuse. Refinery stormwater collection and treatment systems are described in Attachment 2F-IVC.

The significant materials stored in the greatest quantities at the refinery are petroleum crude oil, refined petroleum intermediates, and finished liquid and gaseous petroleum products. These materials, as well as acids, caustics, petroleum additives, corrosion inhibitors, and other chemicals used in the refinery are stored in aboveground storage tanks with fixed or floating roofs or drums, transferred in piping, and processed in enclosed vessels.

Dikes are provided around field-constructed aboveground storage tanks in which bulk crude oil, refined petroleum intermediates, and finished petroleum products are stored. The disposition of the stormwater from these dikes is based on inspection and/or analysis for contamination. If oil or other contamination is observed, the stormwater is drained to the water treatment plant for treatment prior to discharge through Outfall 101. The source of the oil or other contamination is determined, repairs or adjustments are made to stop the release, and contaminated soils in the area are remediated or removed. If there is no evidence of oil or other contamination, stormwater from tank dikes may be drained into the surface ditch system for treatment in the settling basin prior to discharge through Outfall 002.

Piping is present throughout the refinery. In the areas indicated on the stormwater drainage map, provided in Attachment I, secondary containment is provided, and stormwater from these areas is conveyed to the water treatment plant for treatment prior to discharge through Outfall 101. All other piping is located to ensure stormwater is contained by the surface ditch system and conveyed to the settling basin for treatment prior to discharge through Outfall 002.

In general, areas of the refinery that have the potential to be oily or to experience spills of other significant materials are paved. Stormwater from these areas drain to the water treatment plant for treatment and ultimate discharge through Outfall 101. Examples of areas that drain to the water treatment plant and Outfall 101 include:

- ⇒ **Dock Transfer Manifolds:** The areas of the dock in which loading hose connections are made to vessels are provided with collection systems and/or sumps to capture stormwater which might have contacted hydrocarbons and convey it to the water treatment plant.
- ⇒ **Marketing Terminal Truck Loading Rack:** Similar to the dock, the areas in which loading hose connections are made to tank trucks at the marketing terminal are paved and graded to drain stormwater to the water treatment plant.
- ⇒ **Rail Car Loading Racks:** Similar to the dock and truck loading rack, the rail car loading racks, at which liquefied petroleum gas, caustic, and ethanol may be transferred to and from rail cars, are graded to drain stormwater to the water treatment plant.
- ⇒ **Pumphouse Blending Manifold:** The pumphouse blending manifold is the area in which the pumps and valves that move and direct oil throughout the Refinery are located. Due to the presence of a great many valves and flanges, this area is paved and graded to drain stormwater to the water treatment plant.
- ⇒ **Fire Brigade Training Area:** Due to the presence of hydrocarbons used in training exercises, the fire training area is paved and graded to drain stormwater to the water treatment plant.

- ⇒ **Coker, Combination Unit, Ultraformer, ULSD Unit, Hydrogen Plant, Sulfur Recovery Unit, Gasoline Desulfurization Unit, Power Station, Nitrogen Plant, and Water Treatment Plant Process Units:** These areas of the Refinery contain high concentrations of piping, valves, flanges, pumps, and vessels. Due to the increased potential for the presence or release of hydrocarbons or chemicals, these areas are paved and graded or equipped with curbing to channel stormwater to the water treatment plant.
- ⇒ **Sludge Processing Area:** Sludges from the Refinery are transferred to the Sludge Processing Area prior to being recycled in the Coker. Sludge is stored in tank(s) to prevent contact with stormwater. The sludge processing area is situated on concrete and is surrounded by a concrete dike. The area drains to the water treatment plant.
- ⇒ **Coke Yard:** Excess stormwater from the Refinery's enclosed coke yard that cannot be used to cut coke or spray the coke pile for dust suppression drains to the water treatment plant. Parts of the coke railcar loading area and any other coke storage outside the enclosed yard are managed to minimize the release of coke fines to the Refinery ditch system.
- ⇒ **Tanks 623 and 624:** These new tanks are constructed with secondary containment dikes with drainage to the Refinery wastewater treatment plant.

There are significant amounts of materials associated with the RCRA Solid Waste Management Units (SWMUs) and the Area of Concern (AOC) at the Refinery that are exposed to stormwater. Detailed information on the management of stormwater of the SWMUs and AOC at the Refinery is included in the following documents:

- Risk Assessment and Corrective Measures Study Report prepared for EPA Region III in October 2001
- Corrective Measures Implementation Design – Phase 1, prepared for EPA Region III in February 2007
- Revised Corrective Measures Implementation Work Plan, prepared for the EPA Region III in November 2008

These and other reports are maintained on file in the Refinery's Environmental Department. Below is a current status of each of the SWMUs and the AOC.

- ⇒ **SWMU No. 1: Landfarm 10, CAMU West.** Currently SWMU 1 has a perimeter berm system that captures precipitation that falls within the perimeter (contact water) and stores it until a pump can route it to the water treatment plant for treatment prior to discharge to Outfall 101.
- ⇒ **SWMU No. 2: Landfarm 11.** Precipitation that falls on this area is considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.
- ⇒ **SWMU No. 3: Landfarm 12, CAMU East.** This material was consolidated as part of the CAMU East construction. This area was capped and construction was completed in 2008. Precipitation that falls on this area is considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.
- ⇒ **SWMU No. 4A: Industrial Waste (Asbestos) Landfill.** All materials are covered following placement in the landfill. Therefore, precipitation that falls into this area is normally considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002. However, if a rainfall event were to occur prior to the waste

materials being covered, this contact water would be routed to the treatment system for treatment prior to discharge through Outfall 101.

- ⇒ **SWMU No. 4B: Industrial Waste Landfill.** Precipitation that falls into this area is considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.
- ⇒ **SWMU No. 5 North:** This SWMU contains impacted soil below a layer of clean soil. Therefore precipitation that falls on this area is considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.
- ⇒ **SWMU No. 5 South:** The material from this area was removed and included in CAMU East. This area was capped and construction was completed in 2008. Precipitation that falls on this area is considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.
- ⇒ **SWMU No. 6:** Stormwater from SWMU No. 6 drains in sheet flow to the east in the direction of Bull Creek.
- ⇒ **SWMU No. 7: Equalization Basin/Stormwater Retention Pond/Filter Backwash Pond.** Currently stormwater that falls within these areas (contact water) is captured in the ponds.
- ⇒ **SWMU No. 7: Former API Separator.** The material from this area was removed and included in the construction of CAMU East. This area was capped and construction was completed in 2008. Precipitation that falls on this area is non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.
- ⇒ **SWMU No. 8: Leaded Tank Bottom Disposal Area.** This area is surrounded by perimeter dikes and stormwater (contact water) is routed to the waste water treatment plant prior to discharge to Outfall 101.
- ⇒ **SWMU No. 9: Unleaded Tank Bottom Disposal Area.** This area is also surrounded by perimeter dikes and stormwater (contact water) is routed to the waste water treatment plant prior to discharge to Outfall 101.
- ⇒ **SWMU No. 10: Former Heat Exchanger Cleaning Pad.** The stormwater from this area is considered contact water and is collected by area drains in the Oily Water Sewer. The stormwater is then conveyed to the waste water treatment plant, initially flows through Outfall 101 and is subsequently discharged through Outfall 001 at the end of the dock.
- ⇒ **SWMU No. 11: Container Storage Area.** This area was capped with asphalt paving during the CMI construction in 2007. Precipitation that falls on this area is considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.
- ⇒ **SWMU No. 12: Hazardous Material Storage Building and Drum Storage Area.** This area was also capped during the CMI construction in 2007 and therefore can drain without further treatment. Precipitation that falls on this area is considered non-contact water and is conveyed through the refinery's surface water ditch system to the stormwater settling basin and discharges through Outfall 002.

- ⇒ **AOC No. 1: North Coker Ditch.** The stormwater from this area is considered contact water and is collected by area drains in the Oily Water Sewer. The stormwater is then conveyed to the waste water treatment plant, initially flows through Outfall 101 and is subsequently discharged through Outfall 001 at the end of the dock.

Significant solid materials stored at the refinery include refining process catalysts, refinery hazardous and nonhazardous wastes, petroleum coke, and refinery construction materials. Catalysts are generally stored indoors in sacks or in drums until placed into use in refinery process vessels. Catalyst loading and unloading takes place on process unit decks. When their useful life has been reached, catalysts are manually removed from process vessels and placed in roll-off boxes, drums, or other containers or removed with vacuum trucks. Process catalysts are presently shipped off-site for recycling, reuse, or disposal, and may on occasion be disposed in the active industrial waste landfill at the refinery.

Petroleum coke is processed and stored at the coke yard west of the Coker. Water is used for removing coke from coke drums and to wet the coke for dust suppression. Water that drains through the coke pile is collected at the Coker and reused for coke removal and dust suppression. Excess stormwater drains to the water treatment plant. Parts of the coke railcar loading area and any other coke storage outside the enclosed yard are managed to minimize the release of coke fines to the Refinery ditch system.

Significant materials are also present at the 90-day hazardous waste drum accumulation area (waste storage building) north of the Sulfur Recovery Unit (SRU). There is no stormwater runoff from the hazardous waste drum accumulation area, since it is enclosed. Stormwater from the concrete pad on which hazardous waste roll-off boxes are stored nearby accumulates in a sump until it is removed via vacuum truck for treatment in the refinery water treatment plant and eventual discharge through Outfall 101. Stormwater from the exposed area in which nonhazardous waste drums are accumulated is treated in the stormwater settling basin and discharged through Outfall 002. Hazardous and nonhazardous wastes are stored in drums or roll-off boxes to prevent contact with stormwater. Spills of hazardous and nonhazardous wastes from these containers are contained and cleaned up immediately. Recovered materials are properly containerized, classified, inventoried and managed as either hazardous or non-hazardous waste until they are transferred off-site for disposal or recycling.

Construction materials are stored indoors in warehouses or outside in open material storage yards. Typical construction materials present in open material storage yards at the Refinery include clean heat exchanger bundles, piping, valves, conduit, and structural steel. Stormwater from these areas is assumed to be non-contact and is discharged to the ditch system

To control the growth of nuisance vegetation, herbicides are periodically used throughout the Refinery in catchments and other storm water drainage areas. The frequency of use of the herbicides varies seasonally depending upon the rate of vegetation growth. Herbicides are evaluated for potential environmental impacts prior to usage in the Refinery. No herbicides are used at the Refinery, that contain any water priority chemicals. Herbicides are used in strict compliance with label instructions. Stormwater runoff samples collected from Outfalls 101 and 002 in 1999, 2004, and 2009 were analyzed for the presence of pesticides and herbicides listed in EPA Form 2F. None were detected.

Soil conditioners and fertilizers are not used in the Refinery. Fertilizers are not used in order to ensure compliance with the total phosphorus limits that will become effective at Outfall 002 effluent in 2011.

EPA Form 2F-IV.C.

Structural and Nonstructural Control Measures

The Yorktown Refinery is designed and managed to prevent or minimize the release of contaminants in storm water. Both structural and nonstructural control measures are employed. A description of the refinery's controls, and the treatment each of the refinery's storm water effluents receives is presented below.

Nonstructural controls include the following:

1. Stormwater Pollution Prevention Plan

This Plan is developed and is maintained in accordance with the requirements of the facility VPDES permit. It describes the systems, equipment, and practices in place to prevent stormwater contamination and control stormwater discharges.

2. Virginia Oil Discharge Contingency Plan (ODCP), Spill Prevention, Control, and Countermeasures (SPCC) Plan, and Facility Response Plan

The Refinery's ODCP, SPCC Plan, and Facility Response plan describe equipment, operation and maintenance practices, and response procedures for preventing pollutants from oil spills from contaminating storm water runoff at the refinery.

3. RCRA Contingency Plan

The refinery's RCRA Contingency Plan describes procedures for preventing pollutants from hazardous and nonhazardous waste from contaminating storm water runoff at the refinery in the event of a RCRA incident.

(Note: Western currently intends to consolidate the above Plans into an Integrated Contingency Plan (ICP), which will address all applicable requirements.)

4. Training Guides and Standard Operating Instructions

Training Guides and Standard Operating Instructions for each operating division at the refinery describe how refinery processing, mechanical, and pollution control equipment is to be operated to prevent pollutants associated with refinery operations from being released and contaminating storm water runoff.

5. Formal and Informal Training

Refinery operating staff receive formal refresher training annually. Relevant topics in the refresher training session include Water Pollution Prevention, SPCC, and RCRA. Informal training may also be administered throughout the year. Training helps ensure that operating staff understands the importance of preventing storm water contamination.

6. Effluent Monitoring

Routine chemical monitoring is performed on outfall 101 and 002 effluents, both of which contain storm water. Outfall 101 is monitored three days each week; outfall 002, one. Periodic acute and chronic toxicity tests as well as chemical monitoring for priority pollutant metals and organics are also performed on outfall 002 effluent, consistent with the toxics monitoring provisions of the refinery's current VPDES permit. Chemical and biological monitoring of water effluents help the refinery establish the effectiveness of its storm water management practices.

7. Inspections and Maintenance

The refinery is manned 24 hours a day, seven days a week. Operating staff inspects and maintain surveillance over refinery equipment as part of their duties. Maintenance staff or contractors make any repairs that might be required. Written records of some routine inspections, such as weekly aboveground storage tank inspections conducted as part of the AST Pollution Prevention inspection program, are maintained. More involved inspections and maintenance of operating areas are performed at the time of major turnarounds. Periodic internal and external inspections of AST's are performed in accordance with DEQ AST regulations. Inspections and maintenance prevent equipment failures that can cause spills, which contribute to storm water contamination.

Structural measures to control pollutants in storm water at the refinery include the following:

1. Heat Exchanger Cleaning Pad

On the heat exchanger cleaning pad, high pressure water streams are used to wash out exchangers and other equipment. Water and sludge mixtures from this process flow by gravity to a collection sump, which is then emptied to the sewer. The heat exchanger cleaning pad prevents wastewater from oily equipment cleaning operations from contaminating soils or the refinery surface ditch system.

2. Decant Tanks 909, 910, 911, 912, and 913

Decant tanks receive tank bottoms or water draws and provide a means of (1) controlling air emissions from tank water draws/bottoms, and (2) achieving better separation between tank water draws/bottoms and free hydrocarbons associated with them. The decant system is hard piped to the tanks and the slop oil system, thereby preventing the contamination of storm water by dissolved or free hydrocarbons present in tank water bottoms. Water from the decant system is discharged into the aboveground sewer system, while oil is transferred to a slop oil tank for reprocessing.

3. Collection Systems

Process Unit Decks

Processing, transfer, and storage areas such as the coke yard, process unit decks, and truck loading rack are paved, curbed as required, and provided with drainage to either the aboveground or belowground sewer system, whichever is appropriate. These decks prevent untreated process wastewater, oil, or chemical spills from contaminating soils or the refinery ditch system.

Sandblasting and Spraypainting Booth

A concrete pad with drainage to the belowground sewer system is provided to control dust, scale, and overspray from equipment sandblasting and spraypainting operations.

Aboveground Sewer System

The sewer system runs west to east along the south side of Avenue C. It conveys hydrocarbon-containing process wastewater streams such as tank water draws via forced main to the Water Treatment Plant.

Belowground Sewer System and Junction Boxes

This sewer system conveys (1) non-hydrocarbon-containing process wastewater streams, (2) storm water from certain oily areas, and (3) potable and sanitary wastewater from septic tanks to the Water Treatment Plant.

EPA Form 2F-IV.C.

Thermal Relief Sumps

These sumps collect for reprocessing hydrocarbons from piping relief valve releases. These sumps prevent the release of oil to the environment, where it might contaminate storm water or groundwater.

Storm water from oily areas of the refinery, which is ultimately discharged through outfall 101, receives the following treatment.

1. Wastewater Strainer

The wastewater strainer receives flow from the aboveground and belowground sewer systems and flows to the CPI Separators.

2. Above Ground Sewer Pressure Control Manifold

This manifold consists of 4 motor operated valves, which open when aboveground sewer pressures are above 34 psi. It controls how many CPI Separators are operating at any given moment and divert wastewater flow from the separators to Tanks 23 and 24 if flows exceed proper operating ranges.

3. Corrugated Plate Interceptor (CPI) Separators

3 CPI Separators: L-1639, L-1640, and L-1641

4th CPI Separator: L-1642

CPI separators recover sludge and oil from process wastewater. Recovered oil from CPI separators overflows into wet oil receiving drum Tank 55, and then is recycled through the slop oil system. CPI sludge, which is hazardous waste, is pumped to sludge Tank 22, then recycled in the Coker.

4. Tank 55 Wet Oil Receiving Drum

This drum is a reservoir for recovered oil from the CPI separators prior to Tanks 907 and 908.

5. Heavy Slop Oil Tanks 907 and 908

Tanks 907 and 908 receive wet oil from T-55. These tanks are heated with steam coils, which causes water to sink to their bottoms, and oil to float. Slop oil from them is pumped to heavy slop Tank 900 for reprocessing.

6. Sludge Tank 22

These are holding containers and sludge collection containers for sludge and sediment from the CPI separators. The contents are taken by vacuum truck to the Sludge Processing Unit west of the Coker, then recycled in the Coker.

7. Wastewater Receiving Tank 54

This tank is located downstream of the CPI separators. It stores CPI separator effluent, which is then pumped to Tanks 23 and 24.

8. Stormwater Retention Tanks (SWRTs) 23 & 24

Capacity 150,000 BBL or 6.34 million gallons each

EPA Form 2F-IV.C.

The SWRTs provide storm surge storage and flow equalization prior to the IGF and the activated sludge aeration tank. Each SWRT is equipped with oil skimmers.

9. Induced Gas Flotation Unit (I.G.F.)

The IGF further removes oil from the refinery's wastewater. Water from the IGF is pumped to the activated sludge aeration tank. Float is pumped to L-1642 CPI separator.

10. Activated Sludge Aeration Tank

The activated sludge aeration tank biologically treats refinery wastewater. Mixed liquor is pumped to the clarifier/thickener tank.

11. Clarifier/Thickener Tank

The clarifier separates mixed liquor from the activated sludge aeration tank into sludge and water. Water is recycled or discharged through outfall 101. Sludge is recycled to the activated sludge aeration tank or wasted to the aerobic digester.

12. Aerobic Digester

Sludge from the aerobic digester is taken by vacuum truck to the nonhazardous waste sludge tank west of the Coker, then recycled in the Coker.

Storm water from non-oily areas of the refinery, which is ultimately discharged through outfall 002, receives the following treatment:

Storm Water Settling Basin

The storm water settling basin is a quiescent lagoon with a surface area of 5.2 acres. The settling basin is fed by the surface ditch collection system that extends throughout the non-oily areas of the refinery. Both the ditch system and the settling basin are equipped with haybasket filters. The settling basin is also equipped with three sections of oil spill containment boom. This equipment is employed to capture oil and filter out contaminants, which might reach the refinery ditch system in the event of spills. Any spills that occur in the refinery ditch system are contained with earthen dams or absorbent blankets and recovered with vacuum trucks to prevent contamination of storm water.

ATTACHMENT 10

RECEIVING WATERS INFO./
TIER DETERMINATION/STORET DATA/
STREAM MODELING

M E M O R A N D U M

Department of Environmental Quality
Tidewater Regional Office

5636 Southern Boulevard

Virginia Beach, VA 23462

From: SUBJECT: VPDES Application Requests
To: TO: Stephen Cioccia, TRO
FROM: Melinda Woodruff, TRO *meja*
DATE: 12/15/09
COPIES: TRO File - facility # 33 , PPP

An application has been received for the following facility:

VPDES #: VA0003018 Facility Name: Western Refining
Yorktown, Inc.

Topo Map Name: Poquoson West

Receiving Stream: York River

[Must be provided for each outfall included in this request or
request will be returned]

Attached is a Topographic Map showing facility property boundaries
and outfall location(s) for those included in this request. [MUST be
provided or request will be returned]

Attached is a stream data Request Form (if data is requested).

We request the following information from you:

1. X Tier Determination. Tier: See Attachment 1 A-C
Please include a basis for the tier determination.
2. X Stream Data Requested for outfall(s) 001, 002, 004
[“STREAM DATA RETRIEVAL REQUEST FORM” MUST be completed & included]
Returned as e-mail: LE4.3 data York R. Mouth
3. X Is this facility mentioned in a Management Plan?
 ✓ No Yes No, but will be included
when the Plan is updated.
4. X Are limits contained in a Management Plan?
 ✓ No Yes (If Yes, Please include the basis
for the limits.)
5. X Indicate outfall(s) which discharge directly to an
impaired (Category 5) stream segment? Outfalls 001, 002 & 004
6. X Are outfall(s) WLAs contained in an approved TMDL?
 ✓ No Yes (If Yes, Please include the WLAs)

Return Date Requested: 1/4/10

Date Returned: 12/30/09

Until further guidance is provided by OWRM Permits, assessment of waters for NH_3 should be based upon OWRM Guidance No. 93-015 from Larry G. Lawson, dated June 22, 1993.

The above guidance specifies that the ambient NH_3 data should be compared to the NH_3 standard (calculated using 90th percentile of ambient data for pH and temperature of that segment) and by using the "STANDARDS.EXE Program" developed by OWRM Permits Modelling. (These environmental conditions are considered critical design conditions to protect water quality and to comply with WQS.) If the 97th percentile of the in-stream data is greater than either of the calculated NH_3 standards (chronic or acute), then OWRM considers the standard is being violated and the segment is WQL.

2.4.7 Wasteload Allocations Where The 7Q10 Is Zero Or Minimal

A discharge to a water course with a 7Q10 of zero or near zero would be required to have effluent limits that would comply with water quality standards, at a minimum. The discharge would have to be "self sustaining" so to comply with water quality standards. Therefore, the discharge would be WQL and the receiving water course with a 7Q10 of zero near zero would be considered a tier 1 segment.

Dry-ditch
* = Tier 1

A discharge to a tier 1 water that empties into a tier 2 water would have to be evaluated for antidegradation at the point of confluence of the two water courses, if the discharge is in close enough proximity to impact the tier 2 water. In the above scenario, antidegradation requirements to protect tier 2 waters may apply to a discharge to a tier 1 water. Therefore, effluent limits may be more stringent than required by the numerical water quality standards.

If a discharge occurs to a dry ditch or tributary that empties into a free flowing stream and the distance from the discharge to the next confluence is too short to model (based upon the current modelling programs), then the discharge should be modelled as if it occurs directly to the free flowing stream.

2.4.8 Estuaries - Wasteload Allocations & TMDL Development

Similar to freshwater streams, water quality wasteload allocations (WQWLAs) and TMDLs in all tidal influenced waters will be expressed as a mass limitation for the conventional parameters (BOD_5 , cBOD_5 , TKN, and NH_3) and as a concentration for toxics.

Tidal freshwater segments and transition zone segments identified

DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER DIVISION

OFFICE OF WATER RESOURCE MANAGEMENT

(SECOND DRAFT)

GUIDANCE MANUAL

FOR THE

VIRGINIA WATER QUALITY MANAGEMENT PLAN

March 4, 1994

*For Outfalls 101 & 102 only
Attachment 1C-2*

ATTACHMENT 11

303(d) LISTED SEGMENTS

List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	Assessment Unit Description
VAT-F27E_YRK02C00	York River - DSS AdminCond @ Wormley to USCG		Segment is on Yorktown side (south shore) of river. DSS (ADMINISTRATIVE) shellfish condemnation #052-006A (effective 2002-03-07) (portion in York R), from Wormley Cr. to USCG Station, S shore to mid-channel. CBP segment YRKPH.
VA Overall AU 5A	2.68 SQUARE MILES		
Beneficial Use	Impairment	Cause Category	Impairment Specific Comments and/or Impairment Specific VA Category
Aquatic Life	Aquatic Plants	Category 5A	Category 5A 2006 00330 / 2008 YRKPH-SAV-BAY The Shallow-Water Submerged Aquatic Vegetation Use is impaired based on failure to meet the SAV acreage criteria. The mainstem York River was included in EPA's 1998 303(d) Overlisting as impaired of the Aquatic Life Use; the impairment was attributed to excessive nutrients. During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Shallow Water Use's submerged aquatic vegetation acreage requirements.
Sources: Agriculture Atmospheric Deposition - Nitrogen Clean Sediments Industrial Point Source Discharge Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Discharges Sediment Resuspension (Clean Sediment) Sources Outside State Jurisdiction or Borders Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)			

Tier Certification Outfalls 002 & 004

List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	Assessment Unit Description
Aquatic Life	Oxygen, Dissolved	2006	Category 5A 2006 01779 / 2008 YRKPH-DO-BAY The Open-Water Aquatic Life Use is impaired based on failure to meet the 30-day dissolved oxygen criteria for Open Water - Summer & ROY. The mainstem York River was included in EPA's 1998 303(d) Overlisting as impaired of the Aquatic Life Use; the impairment was attributed to excessive nutrients. During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Open Water Use's summer dissolved oxygen criteria.
Deep-Water Aquatic Life	Oxygen, Dissolved	2006	1999 CD segment for nutrients (Attachment A, Category 1, Part 2) VAT-F26E-01 & 1999 segment for DO (Attachment A, Category 1, Part 2) VAT-F27E-03.
		2010	Category 5A 2008 YRKPH-DO-BAY The Deep Water Aquatic Life Use is impaired based on failure to meet the 30-day dissolved oxygen criteria for Deep Water - Summer. The mainstem York River was included in EPA's 1998 303(d) Overlisting as impaired of the Aquatic Life Use; the impairment was attributed to excessive nutrients. During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Deep Water - Summer Use's dissolved oxygen criteria. 1999 CD segment for nutrients (Attachment A, Category 1, Part 2) VAT-F26E-01 & 1999 segment for DO (Attachment A, Category 1, Part 2) VAT-F27E-03.
		2006	Sources: Agriculture Atmospheric Deposition - Nitrogen Industrial Point Source Discharge Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Discharges Sources Outside State Jurisdiction or Borders Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)
		2010	Category 5A 2008 YRKPH-DO-BAY The Deep Water Aquatic Life Use is impaired based on failure to meet the 30-day dissolved oxygen criteria for Deep Water - Summer. The mainstem York River was included in EPA's 1998 303(d) Overlisting as impaired of the Aquatic Life Use; the impairment was attributed to excessive nutrients. During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Deep Water - Summer Use's dissolved oxygen criteria. 1999 CD segment for nutrients (Attachment A, Category 1, Part 2) VAT-F26E-01 & 1999 segment for DO (Attachment A, Category 1, Part 2) VAT-F27E-03.
		2006	Sources: Agriculture Industrial Point Source Discharge Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Discharges Non-Point Source Wet Weather Discharges (Non-Point Source)

Tien Justification Outfalls 002 of 004
Attachment 1A-2

List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	Assessment Unit Description
Fish Consumption	PCB in Fish Tissue	2006	2018
		Category 5A	Category 5A
			<p>Category 5A</p> <p>2006 70001 / 2008 F26E-01-PCB</p> <p>The segment is included under a 12/13/2004 VDH Fish Consumption Advisory due to polychlorinated biphenyls (PCBs) in fish tissue. The advisory recommends that adults eat no more than two meals/month of croaker, gizzard shad, and spot. High risk individuals such as women who are pregnant or may become pregnant, nursing mothers, and young children are advised not to eat any fish contaminated with PCBs. The TMDL is due in 2018. Previous Use ID = VDH-York PCBs. Previous TMDL ID = VDH-York PCB, VAT-F26E-04.</p>
Open-Water Aquatic Life	Oxygen, Dissolved	2006	2010
		Category 5A	Category 5A
			<p>Category 5A</p> <p>2006 01779 / 2008 YRKPH-DO-BAY</p> <p>The mainstem York River was included in EPA's 1998 303(d) Overlisting as Impaired of the Aquatic Life Use; the impairment was attributed to excessive nutrients. During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed both the Open Water Use's summer dissolved oxygen criteria and the Deep Water Use's summer dissolved oxygen criteria.</p> <p>1999 CD segment for nutrients (Attachment A, Category 1, Part 2) VAT-F26E-01 & 1999 segment for DO (Attachment A, Category 1, Part 2) VAT-F27E-03.</p>
		Sources: Source Unknown	
			<p>Sources:</p> <ul style="list-style-type: none"> Agriculture Atmospheric Deposition - Nitrogen Industrial Point Source Discharge Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Discharges Sources Outside State Jurisdiction or Borders Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)

Tica Justification Outfalls 002 & 004
Attachment 2A-3

List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	2006	2010	Assessment Unit Description
Shallow-Water Submerged Aquatic Vegetation	Aquatic Plants	Category 5A			Category 5A 2006 00330 / 2008 YRKPH-SAV-BAY The Shallow-Water Submerged Aquatic Vegetation Use is impaired based on failure to meet the SAV acreage criteria. The mainstem York River was included in EPA's 1998 303(d) Overlisting as impaired of the Aquatic Life Use; the impairment was attributed to excessive nutrients. During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polynaline segment failed the Shallow Water Use submerged aquatic vegetation acreage requirements. Previous TMDL ID = VAT-F26E-08.
Sources:					
Agriculture					
Atmospheric Deposition - Nitrogen					
Clean Sediments					
Industrial Point Source Discharge					
Internal Nutrient Recycling					
Loss of Riparian Habitat					
Municipal Point Source Discharges					
Sediment Resuspension (Clean Sediment)					
Sources Outside State Jurisdiction or Borders					
Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)					

Tier Justification Outfalls
Attachment 2A-4

0018004

List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	Assessment Unit Description
VAT-F27E_ZZZ01A00	Unsegmented estuaries in F27E		
VA Overall AU 5A	0.27 SQUARE MILES		Non segmented estuarine areas of F27E - Lower York River. Primarily north shore tribs between Cedarbush and Timberneck Creeks. CBP segment YRKPH. No DSS condemnations.
Beneficial Use	Impairment	Cause Category	Impairment Specific Comments and/or Impairment Specific VA Category
Aquatic Life	Aquatic Plants	Category 5A	Category 5A 2006 00330 / 2008 YRKPH-SAV-BAY During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Shallow Water Use's submerged aquatic vegetation acreage requirements.
			<p>Sources:</p> <ul style="list-style-type: none"> Agriculture Atmospheric Deposition - Nitrogen Clean Sediments Industrial Point Source Discharge Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Discharges Sediment Resuspension (Clean Sediment) Sources Outside State Jurisdiction or Borders Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)
Aquatic Life	Oxygen, Dissolved	Category 5A	Category 5A 2006 01779 / 2008 YRKPH-DO-BAY During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Open Water Use's summer dissolved oxygen criteria.
			<p>Sources:</p> <ul style="list-style-type: none"> Agriculture Atmospheric Deposition - Nitrogen Industrial Point Source Discharge Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Discharges Sources Outside State Jurisdiction or Borders Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)

Tier Justification Outfalls 001 & 004
Attachment 1A-5

List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	Assessment Unit Description
Open-Water Aquatic Life	Oxygen, Dissolved	Category 5A	Category 5A 2006 01779 / 2008 YRKP-H-DO-BAY
		2006	2010
		Sources:	
		Agriculture	
		Atmospheric Deposition - Nitrogen	
		Industrial Point Source Discharge	
		Internal Nutrient Recycling	
		Loss of Riparian Habitat	
		Municipal Point Source Discharges	
		Sources Outside State Jurisdiction or Borders	
		Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	
		2006	2010
Shallow-Water Submerged Aquatic Vegetation	Aquatic Plants	Category 5A	Category 5A 2006 00330 / 2008 YRKP-H-SAV-BAY
		During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Shallow Water Use's submerged aquatic vegetation acreage requirements.	
		Sources:	
		Agriculture	
		Atmospheric Deposition - Nitrogen	
		Clean Sediments	
		Industrial Point Source Discharge	
		Internal Nutrient Recycling	
		Loss of Riparian Habitat	
		Municipal Point Source Discharges	
		Sediment Resuspension (Clean Sediment)	
		Sources Outside State Jurisdiction or Borders	
		Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	

Tien Justification Outfalls 002 & 004
Attachment 1A-6

List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	Assessment Unit Description
VAT-F27E_ZZZ01A00	Unsegmented estuaries in F27E		Non segmented estuarine areas of F27E - Lower York River. Primarily north shore tribs between Cedarbush and Timberneck Creeks. CBP segment YRKPH. No DSS condemnations.
VA Overall AU 5A	0.27 SQUARE MILES		
Beneficial Use	Impairment	Cause Category	Impairment Specific Comments and/or Impairment Specific VA Category
Aquatic Life	Aquatic Plants	Category 5A	Category 5A 2006 00330 / 2008 YRKPH-SAV-BAY During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Shallow Water Use's submerged aquatic vegetation acreage requirements.
		2006	2010
		First Listed on 303(d)	TMDL Schedule
		Sources:	
		Agriculture	
		Atmospheric Deposition - Nitrogen	
		Clean Sediments	
		Industrial Point Source Discharge	
		Internal Nutrient Recycling	
		Loss of Riparian Habitat	
		Municipal Point Source Discharges	
		Sediment Resuspension (Clean Sediment)	
		Sources Outside State Jurisdiction or Borders	
		Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	
		2006	2010
		Category 5A	2006 01779 / 2008 YRKPH-DQ-BAY
		Oxygen, Dissolved	Category 5A
		Aquatic Life	During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Open Water Use's summer dissolved oxygen criteria.
		Sources:	
		Agriculture	
		Atmospheric Deposition - Nitrogen	
		Industrial Point Source Discharge	
		Internal Nutrient Recycling	
		Loss of Riparian Habitat	
		Municipal Point Source Discharges	
		Sources Outside State Jurisdiction or Borders	
		Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	

Tier Justification Outfall 002

Attachment 1B-1

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List of Impaired (Category 5) Waters in 2008 IR

Assessment Unit ID	Waterbody Name	City / County*	Assessment Unit Description
Open-Water Aquatic Life	Oxygen, Dissolved	Category 5A	Category 5A 2006 01779 / 2008 YRKPH-DO-BAY
		2006	2010
		Sources:	
		Agriculture	
		Atmospheric Deposition - Nitrogen	
		Industrial Point Source Discharge	
		Internal Nutrient Recycling	
		Loss of Riparian Habitat	
		Municipal Point Source Discharges	
		Sources Outside State Jurisdiction or Borders	
		Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	
		2006	2010
Shallow-Water Submerged Aquatic Vegetation	Aquatic Plants	Category 5A	Category 5A 2006 00330 / 2008 YRKPH-SAV-BAY
		Sources:	
		Agriculture	
		Atmospheric Deposition - Nitrogen	
		Clean Sediments	
		Industrial Point Source Discharge	
		Internal Nutrient Recycling	
		Loss of Riparian Habitat	
		Municipal Point Source Discharges	
		Sediment Resuspension (Clean Sediment)	
		Sources Outside State Jurisdiction or Borders	
		Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)	

During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Open Water Use's summer dissolved oxygen criteria.

During the 2006 cycle, the revised Chesapeake Bay water quality standards were adopted. The York Polyhaline segment failed the Shallow Water Use's submerged aquatic vegetation acreage requirements.

Tien Justification Outfall 002
A+L... + 1R-2

ATTACHMENT 12

TABLE III (a) AND TABLE III (b) -
CHANGE SHEETS

TABLE III(a)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
101	BOD ₅		503 monthly average/550 907 daily max/990	Production Rate Changed	3/4/10 MYW
101	TSS		403 monthly average/580 630 daily max/690	Production Rate Changed	3/4/10 MYW
101	TOC		1100 monthly average/1200 2000 daily max/2200	Production Rate Changed	3/4/10 MYW
101	Oil & Grease		150 monthly average/160 280 daily max/300	Production Rate Changed	3/4/10 MYW
101	Ammonia		260 monthly average/280 570 daily max/620	Production Rate Changed	3/4/10 MYW
101	Total Phenols		2.8 monthly average/3.0 6.8 daily max/7.4	Production Rate Changed	3/4/10 MYW
101	Sulfide		2.5 monthly average/2.7 5.6 daily max/6.1	Production Rate Changed	3/4/10 MYW
101	Total Chromium		3.3 monthly average/3.6 9.6 daily max/10	Production Rate Changed	3/4/10 MYW
101	Hexavalent Chromium		0.3 monthly average/0.31 0.6 daily max/0.68	Production Rate Changed	3/4/10 MYW
101,102, 002,004	Fecal Coliform And Enterococci	None/2/Month (between 10 am and 4 pm)	None/200 and 35	Water Quality Standards and BPJ for reclamation and reuse waters	3/4/10 MYW

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
002	Total Arsenic, Total Cadmium, Total Chromium	None/1/Month	NL monthly average and daily maximum	BPJ to protect water quality and monitor storm water for CAMUS	3/4/10 MYW
002	Total Nitrogen	1/Month/None		BPJ included in Nutrient General Permit	3/22/10 MYW
201	Total Xylenes	1/Month/1/Year	82 daily max/33	BPJ and Program Guidance	3/4/10 MYW
201	Naphthalene	1/Month/1/Year	62 daily max/10	BPJ and Program Guidance	3/4/10
201	All	1/Month/1/Year		BPJ and decrease in testing	3/4/10 MYW
004	Flow	None/1/Week	NL	BPJ for reclamation and reuse waters	3/4/10 MYW
004	pH	None/1/Week	6.0 min and 9.0 max	BPJ for reclamation and reuse waters	3/4/10 MYW

OTHER CHANGES FROM:		CHANGED TO:	DATE & INITIAL
Outfall 001, 002 Part I.A. Total Phosphorus footnote [a] for quantification level and reporting requirements (Part I.B.6 and I.B.7)		Removed because the parameter is limited in the permit, program guidance.	3/4/10 MYW
Outfall 102, 002 Part I.A. Total Organic Carbon [a] for quantification level and reporting requirements (Part I.B.6 and I.B.7)		Removed because the parameter is limited in the permit, program guidance.	3/4/10 MYW
Outfall 201 Part I.A. TPH, Benzene, Toluene, Ethylbenzene, Total Xylenes, and Naphthalene footnote [a] for quantification level and reporting requirements (Part I.B.6 and I.B.7)		Removed because the parameter is limited in the permit, program guidance.	3/4/10 MYW
Outfall 201 Part I.A. Benzene, Toluene, Ethylbenzene, Total Xylenes, and Naphthalene footnote [c] and [d] testing protocols per product		Removed based on BPJ to qualify the mix of wastewater and residues in the system as gasoline or other products at the outfall during testing.	3/4/10 MYW

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
	Part I.B. Special Conditions - added .e for Compliance reporting regarding significant figures.	3/4/10 MYW
	Part I.B.6 added Qls for Arsenic, Cadmium, and Chromium	3/4/10 MYW

TABLE III(b)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 13

NPDES INDUSTRIAL PERMIT RATING WORKSHEET
AND
EPA PERMIT CHECKLIST

☐ Regular Addition
☐ Discretionary Addition
☐ Score change, but no status change
☐ Deletion

Reach Number: | | | | | | | | | |

☐ YES; score is 700 (stop here)
☒ NO (continue)

NPDES Permit Rating Work Sheet

NPDES No.: V A 0 0 0 3 0 1 8

FACTOR 3: Conventional Pollutants (only when limited by the permit)

A. Oxygen Demanding Pollutant: (check one) ☒ BOD ☐ COD ☐ Other: _____

Permit Limits: (check one)		Code	Points
<input type="checkbox"/>	< 100 lbs/day	1	0
<input checked="" type="checkbox"/>	100 to 1000 lbs/day	2	5
<input type="checkbox"/>	>1000 to 3000 lbs/day	3	15
<input type="checkbox"/>	>3000 lbs/day	4	20

Code Checked: 2
Points Scored: 5

B. Total Suspended Solids (TSS)

Permit Limits: (check one)		Code	Points
<input type="checkbox"/>	< 100 lbs/day	1	0
<input checked="" type="checkbox"/>	100 to 1000 lbs/day	2	5
<input type="checkbox"/>	>1000 to 5000 lbs/day	3	15
<input type="checkbox"/>	>5000 lbs/day	4	20

Code Checked: 2
Points Scored: 5

C. Nitrogen Pollutant: (check one) ☒ Ammonia ☐ Other: _____

Permit Limits: (check one)		Code	Points
<input type="checkbox"/>	< 300 lbs/day	1	0
<input checked="" type="checkbox"/>	300 to 1000 lbs/day	2	5
<input type="checkbox"/>	>1000 to 3000 lbs/day	3	15
<input type="checkbox"/>	>3000 lbs/day	4	20

Code Checked: 2
Points Scored: 5

Total Points Factor 3: 1 5

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this includes any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above referenced supply.

☐ YES (if yes, check toxicity potential number below)
☒ NO (if no, go to Factor 5)

Determine the human health toxicity potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the human health toxicity group column -- check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	0	<input type="checkbox"/> 7.	7	15
<input type="checkbox"/> 1.	1	0	<input type="checkbox"/> 4.	4	0	<input type="checkbox"/> 8.	8	20
<input type="checkbox"/> 2.	2	0	<input type="checkbox"/> 5.	5	5	<input type="checkbox"/> 9.	9	25
			<input type="checkbox"/> 6.	6	10	<input type="checkbox"/> 10.	10	30

Code Number Checked:
Total Points Factor 4:

NPDES Permit Rating Work Sheet

NPDES No.: VA0003018

FACTOR 5: Water Quality Factors

- A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a wasteload allocation been assigned to the discharge?

	Code	Points
<u>X</u> Yes	1	10
<u> </u> No	2	0

- B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

	Code	Points
<u>X</u> Yes	1	0
<u> </u> No	2	5

- C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

	Code	Points
<u> </u> Yes	1	10
<u>X</u> No	2	0

Code Number Checked: A 1 B 1 C 2

Points Factor 5: A 10 + B 0 + C 0 = 10 TOTAL

FACTOR 6: Proximity to Near Coastal Waters

- A. Base Score: Enter flow code here (from Factor 2): 52 Enter the multiplication factor that corresponds to the flow code: 1

Check appropriate facility HPRI Code (from PCS):

HPRI #	Code	HPRI Score	Flow Code	Multiplication Factor
<u> </u> 1	1	20	11, 31, or 41	0.00
<u> </u> 2	2	0	12, 32, or 42	0.05
<u> </u> 3	3	30	13, 33, or 43	0.10
<u>X</u> 3	3	30	14 or 34	0.15
<u> </u> 4	4	0	21 or 51	0.10
<u> </u> 5	5	20	22 or 52	0.30
			23 or 53	0.60
			24	1.00

HPRI code checked: 3

Base Score: (HPRI Score) 30 x (Multiplication Factor) 1.0 = 30 (TOTAL POINTS)

- B. Additional Points--NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

	Code	Points
<u>X</u> Yes	1	10
<u> </u> No	2	0

- C. Additional Points--Great Lakes Area of Concern

for a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 areas of concern (see instructions)

	Code	Points
<u> </u> Yes	1	10
<u>X</u> No	2	0

Code Number Checked: A 3 B 1 C 2

Points Factor 6: A 30 + B 10 + C 00 = 40 TOTAL

NPDES Permit Rating Work Sheet

NPDES NO: V A 0 0 0 3 0 1 8

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	<u>40</u>
2	Flow/Stream flow Volume	<u>50</u>
3	Conventional Pollutants	<u>15</u>
4	Public Health Impacts	<u>10</u>
5	Water Quality Factors	<u>40</u>
6	Proximity to Near Coastal Waters	<u> </u>
TOTAL (Factors 1-6)		<u>155</u>

S1. Is the total score equal to or greater than 80? ☒ Yes (Facility is a major) ☐ No

S2. If the answer to the above question is no, would you like this facility to be discretionary major?

☐ No
☐ Yes (add 500 points to the above score and provide reason below:

Reason:

NEW SCORE: 155

OLD SCORE:

Melinda Woodruff
 Permit Reviewer's Name

(757) 518 - 2174
 Phone Number

January 2010
 Date

**State "Transmittal Checklist" to Assist in Targeting
Municipal and Industrial Individual NPDES Draft Permits for Review**

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Western Refining Yorktown, Inc.

NPDES Permit Number: VA0003018

Permit Writer Name: Melinda Woodruff

Date: January 2010

Major ☒Minor ☐Industrial ☐Municipal ☐**I.A. Draft Permit Package Submittal Includes:**

	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?		X	
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?	X		
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics

	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		

I.B. Permit/Facility Characteristics - cont.	Yes	No	N/A
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?	X		
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?		X	
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?	X		
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?	X		
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?	X		
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?	X		
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals (To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration

	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements

	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)

	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?	X		
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?	X		
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?			X
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a “reasonable measure of ACTUAL production” for the facility (not design)?	X		
5. Does the permit contain “tiered” limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ) – cont.	Yes	No	N/A
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?	X		
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

<u>II.D. Water Quality-Based Effluent Limits</u>	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?			X
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?			X
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?			X
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?			X
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?			X
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the fact sheet indicate that an “antidegradation” review was performed in accordance with the State’s approved antidegradation policy?	X		

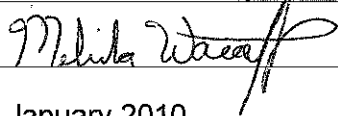
<u>II.E. Monitoring and Reporting Requirements</u>	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?	X		

<u>II.F. Special Conditions</u>	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?		X	
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?			X
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		

<u>II.G. Standard Conditions</u>	Yes	No	N/A
1. Does the permit contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		
List of Standard Conditions – 40 CFR 122.41			
Duty to comply	Property rights	Reporting Requirements	
Duty to reapply	Duty to provide information	Planned change	
Need to halt or reduce activity	Inspections and entry	Anticipated noncompliance	
not a defense	Monitoring and records	Transfers	
Duty to mitigate	Signatory requirement	Monitoring reports	
Proper O & M	Bypass	Compliance schedules	
Permit actions	Upset	24-Hour reporting	
		Other non-compliance	
2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	<u>Melinda Woodruff</u>
Title	<u>Environmental Engineer Sr.</u>
Signature	<u></u>
Date	<u>January 2010</u>

ATTACHMENT 14

CHRONOLOGY SHEET

Chronology of Events

03/05/2010

NPID	VA0003018	Facility Name	Western Refining Yorktown Incorporated		Activity	Reissuance
Code		Event		Date	Comment	
APRET4	App returned/Additional info requested 4th time					
MISC	Miscellaneous		12/08/2009	Tom requested more time for corrections, I said no problem but I'd like to have everything in by the 17th which is when we are expecting info. from the other state agencies.		
DT1VIMS	VMRC concurrence on draft permit					
DTOWN3	FS/SOB draft permit sent to owner 3rd time					
PN2CO	PN sent to CO for mailing list web site distrib					
PNOT	Date of Public Notice					
LGNRAPP	local gov't notified of receipt of app. (Iss/Mod)					
DTCOE	Comments rec'vd from Federal Agencies on App					
VPDESNO	Permit number obtained (Iss)					
DTADJ	FS/SOB/draft permit sent to adj. State					
DTOWNC3	Third time comments received from owner					
DTOWNC4	Owner concurrence of draft permit					
LGNPERM	Local gov't notification					
316A	316(a) Variance					
APRPHOCAL2	Second Application Reminder Phone Call		10/23/2009	Spoke with Tom Numbers at ERM-Consultant for Western. Questions about application answered. They will be asking for the SW outfall that discharges to the treatment plant to be eliminated		
FAMSUB	Financial Assurance Mechanism Submitted					
DTC1VDH	Comments rec'vd from State Agencies on App		01/11/2010	VDH 12/8/09, DSS 1/11/2010		
DTDDP	Draft permit developed		03/05/2010			
DTC2VDH	VDH concurrence on draft permit					
DTDMRDUE	First DMR due					
DTPKVDH	FS/SOB draft permit sent to State Agencies (list i					
ROLISTR	Riparian owner list received					
APRD4	Applic/Additional info received at RO 4th time					
DTEPA	FS/SOB draft permit sent to EPA/OWP					
APRET1	App returned/Additional info requested 1st time		11/24/2009	sent email requesting additional information and corrections.		
APRET2	App returned/Additional info requested 2nd time		12/21/2009			
DTSITERP	Site inspection report		10/02/2009	9/30/09 inspection date		
DTREV	Draft reviewed					

NPID VA0003018		Facility Name	Western Refining Yorktown Incorporated	Activity	Reissuance
Code	Event	Date	Comment		
DTOWN1	FS/SOB draft permit sent to owner				
DTC2EPA	EPA concurrence on draft permit				
SCCERTR	State Corporation certification received				
RONOTE	Riparian landowners notified (Iss,Mod)				
APRET3	App returned/Additional info requested 3rd time				
DTMIF	App sent to Fed Agencies (list in comment field)				
APCP	Application totally / technically complete	02/10/2010			
DTSITE	Site visit	12/21/2009			
DTOBJ1	First time comments received from owner on draft				
DTOWN4	FS/SOB draft permit sent to owner 4th time				
DTNEWS	Public notice letter sent to newspaper				
PNHEAR	Public hearing date				
DTEFF	Permit effective				
DTLP	Reissuance letter mailed	05/15/2009			
APRD2	Applic/Additional Info received at RO 2nd time	12/01/2009			
DT1PLAN	FS/SOB draft permit sent to planning				
DTPLAN	Planning concurrence on draft permit				
DTOWN2	FS/SOB draft permit sent to owner 2nd time				
DTSIGN	Date Permit signed				
FLED	Permit expires	05/15/2010			
PREVFLED	Old expiration date	05/15/2010			
APDU	Reissuance application due	11/16/2009			
DEPFEE	Application fee deposited				
RORTTC	Riparian owner request sent to tax commissioner				
ROAPCP	Application Administratively complete	12/03/2009			
DT1VDH	App sent to State Agencies (list in comment field)	12/03/2009	VDH, DSS, VMRC		
DTOWNC2	Second time comments received from owner				
DTPNAUT	Public notice authorization received from owner	01/12/2010			
MISC	Miscellaneous	08/17/2009	Preapplication Meeting with Tom Numbers		
APRPHOCAL1	First Application Reminder Phone Call	07/30/2009	Spoke with Tom Numbers at ERM-Consultant hire to put together reissuance application.		
APRD	Application received at RO 1st time	11/16/2009			
APRD3	Applic/Additional info received at RO 3rd time				
MISC	Miscellaneous	08/27/2009	Request from Western to correct township change from Grafton, VA to Yorktown, VA, the current official address		
APCOMLET	App complete letter sent to permittee	02/10/2010			